

## State of Mississippi



#### AIR POLLUTION CONTROL PERMIT

Permit To Construct Air Emissions Equipment

#### THIS CERTIFIES

AC Polymers Inc 103 Lowry Drive Byhalia, MS Marshall County

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: DEC 2 2 2015

**Expires:** 

Permit No.

1780-00054

Agency Interest # 10494

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AC Polymers Inc Subject Item Inventory Permit Number: 1780-00054 Activity ID No.: PER20150001

#### **Subject Item Inventory:**

ID	Designation	Description
AREA2	AA-000	Facility-Wide Requirements
EQPT1	AA-001	2,000-gallon Reactor #1 sharing common vent with Reactor #2, AA-002
EQPT2	AA-002	2,000-gallon Reactor #2 sharing common vent with Reactor #1, AA-001
EQPT3	AA-003	2,000-gallon Reactor #3 sharing common vent with Reactor #4, AA-004
EQPT4	AA-004	2,000-gallon Reactor #4 sharing common vent with Reactor #3, AA-003
EQPT5	AA-005	1,000-gallon Reactor #5
EQPT16	AA-006	Product Dryer equipped with a cyclone and baghouse for recovering product, venting inside the building
EQPT6	AB-001	15,000-gallon horizontal Styrene Storage Tank
EQPT7	AB-002	15,000-gallon horizontal Styrene Storage Tank
EQPT8	AB-003	8,500-gallon horizontal Styrene Storage Tank
EQPT9	AB-004	5,000-gallon fixed roof Divinylbenzene Storage Tank sharing common vent and flame arrestor with AB-005
EQPT10	AB-005	5,000-gallon fixed roof Divinylbenzene Storage Tank sharing common vent and flame arrestor with AB-004
EQPT11	AB-006	4,500-gallon fixed roof Divinylbenzene Storage Tank sharing common vent and flame arrestor with AB-007
EQPT12	AB-007	4,500-gallon fixed roof Divinylbenzene Storage Tank sharing common vent and flame arrestor with AB-006
EQPT13	AB-008	Fixed roof lost batch dump tank (located on exterior of building)
AREA1	AC-001	Fugitive emissions of VOC from equipment leaks
EQPT14	AD-001	4.185 MMBtu/hr Natural Gas-Fired Boiler
EQPT15	AD-002	180 kW (241 hp) Natural Gas-Fired Emergency Generator (Spark Ignition Internal Combustion Engine (SI ICE), 4-stroke, rich burn, pre-2006 model)

AC Polymers Inc Subject Item Inventory Permit Number: 1780-00054 Activity ID No.: PER20150001

### **Subject Item Inventory:**

ID	Designation	Description
AI10494	10494	Styrene-divinylbenzene polymer production

AI = Agency Interest
CAFO = Concentrated Animal Feeding Operation
EQPT = Equipment
IMPD = Impoundment
PCS = PCS
TRMT = Treatment

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#### AI0000010494 (10494) Styrene-divinylbenzene polymer production:

## **Submittal/Action Requirements:**

Condition No.	Condition
S-1	The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. [11 Miss. Admin.Code Pt. 2, R.2.5.C(4).]
S-2	Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. [11 Miss. Admin.Code Pt. 2, R.2.5.C (2).]
S-3	General Condition: The permittee shall submit certification of construction: Due within thirty (30) days of completion of construction or installation of an approved stationary source or prior to startup, whichever is earlier. The notification shall certify that construction or installation was performed in accordance with the approved plans and specifications. In the event there is any change in construction from the previously approved plans and specifications or permit, the permittee shall promptly notify MDEQ in writing. If MDEQ determines the changes are substantial, MDEQ may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. [11 Miss. Admin. Code Pt. 2, R. 2.5.D.]

## Narrative Requirements:

#### **General Condition:**

Condition No.	Condition
T-1	General Condition: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control. [Miss. Code Ann. 49_17_39]
T-2	General Condition: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for good cause shown including, but not limited to, the following: a. Persistant violation of any terms or conditions of this permit; b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or c. A change in any condition that requires either a temporary or permanent reduction or elimination of previously authorized air emissions. [11 Miss. Admin.Code Pt. 2, R.2.2.C.]

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#### AI0000010494 (10494) Styrene-divinylbenzene polymer production:

Condition No.	Condition
T-3	General Condition: The permittee shall allow the Mississippi Environmental Quality Commission, the Mississippi Environmental Quality Permit Board, MDEQ staff and/or their authorized representatives, upon the presentation of credentials:  a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and  b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring equipment or monitoring method required in this permit, and to sample any air emission. [Miss. Code Ann. 49_17_21]
T-4	General Condition: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in Regulation 11 Miss. Admin. Code Pt.2, R. 1.10 "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. [11 Miss. Admin. Code Pt. 2, R. 1.10]
T-5	General Condition: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. [Miss. Code Ann. 49_17_29]
T-6	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49_17_29 1.b]
T-7	General Condition: The stationary source shall be designed and constructed so as to operate without causing a violation of any Applicable Rules and Regulations or this permit, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. [11 Miss. Admin.Code Pt. 2, R.2.5.A.]
Condition No.	Condition
T-8	General Condition: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. [11 Miss. Admin.Code Pt. 2, R.2.5.A(4).]

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#### AI0000010494 (10494) Styrene-divinylbenzene polymer production:

Condition No.	Condition
T-9	General Condition: Regarding compliance testing:  (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.  (b) Compliance testing will be performed at the expense of the permittee.  (c) Each emission sampling and analysis report shall include but not be limited to the following:  1. detailed description of testing procedures;  2. sample calculation(s);  3. results; and  4. comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit. [11 Miss. Admin.Code Pt. 2, R.2.6.B(3),(4)&(6).]
T-10	General Condition: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to net out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. [11 Miss. Admin.Code Pt. 2, R.2.5.D(7).]
T-11	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).]
T-12	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).]
T-13	General Condition: Except as prohibited in 11 Miss. Admin. Code Pt. 2,R. 2.5.D(7) after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).]

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#### AI0000010494 (10494) Styrene-divinylbenzene polymer production:

Condition No.	Condition
T-14	General Condition: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. [11 Miss. Admin.Code Pt. 2, R.2.5.D(3).]
T-15	General Condition: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. [11 Miss. Admin.Code Pt. 2, R.2.5.C(1).]
T-16	General Condition: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [11 Miss. Admin.Code Pt. 2, R.1.1.D(7).]
T-17	General Condition: This permit shall not be transferred except upon approval of the Permit Board. [11 Miss. Admin.Code Pt. 2, R.2.16.B.]
T-18	General Condition: The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15) (d).]
T-19	General Condition: The permit does not convey any property rights of any sort, or any exclusive privilege. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(c).]
T-20	General Condition: The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(b).]
T-21	General Condition: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(a).]
T-22	General Condition: The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities. [11 Miss. Admin.Code Pt. 2, R.2.1.D(7).]

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#### AI0000010494 (10494) Styrene-divinylbenzene polymer production:

Condition No.	Condition
T-23	General Condition: It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. [11 Miss. Admin.Code Pt. 2, R.2.1.D(6).]
T-24	General Condition: The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law. [11 Miss. Admin.Code Pt. 2, R.2.2.B(5).]
T-25	General Condition: This permit is for air pollution control purposes only. [11 Miss. Admin.Code Pt. 2, R.2.1.D.]

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#### AREA000000001 (AC-001) Fugitive emissions of VOC from equipment leaks:

#### **Limitation Requirements:**

Condition		
No.	Parameter	Condition
L-1		For Emission Point AC-001, the permittee shall comply with the requirements specified in 40 CFR 60.482-1 through 60.482-10 no later than 180 days after initial startup. The permittee may elect to comply with the requirements specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.562-2(a) and (b)]

## **Monitoring Requirements:**

Condition No.	Parameter	Condition
	T diamotor	Condition
M-1		The permittee shall comply with the provisions specified in 40 CFR 60.485 for test methods and procedures. [40 CFR 60.562 -2(d)]

## **Record-Keeping Requirements:**

Condition No.	Condition
R-1	The permittee shall comply with the recordkeeping requirements of 40 CFR 60.486. [40 CFR 60.562-2(e)]

### **Submittal/Action Requirements:**

Condition No.	Condition
S-1	The permittee shall comply with the reporting requirements of 40 CFR 60.487. [40 CFR 60.562-2(e)]

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#### AREA000000001 (AC-001) Fugitive emissions of VOC from equipment leaks:

Condition No.	Condition
T-1	The permittee is subject to the applicable requirements of the New Source Performance Standards for VOC Emissions from the Polymer Manufacturing Industry (40 CFR Part 60, Subpart DDD) and the applicable General Provisions (40 CFR Part 60, Subpart A). Specifically, the permittee is subject to the requirements for VOC emissions from equipment leaks from the polystyrene manufacturing process. [40 CFR 60.560(a)(4)]

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#### AREA000000002 (AA-000) Facility-Wide Requirements:

## **Limitation Requirements:**

Condition No.	Parameter	Condition
L-1	Opacity	Opacity: The permittee shall not cause, allow, or permit the discharge into the ambient air from any point source of emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity. This shall not apply to vision obscuration caused by uncombined water droplets. [11 Miss. Admin. Code Pt. 2, R. 1.3.B.]
L-2	Styrene	Styrene: The permittee shall limit the facility-wide emissions of styrene to no more than 9.9 tons per year, as determined for each consecutive 12-month period. [11 Miss. Admin. Code Pt. 2, Ch. 2. 2.2.B(10).]
L-3		The permittee shall not cause, permit, or allow the emission of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets or combination thereof, to exceed teh amount determined by the relationship: $E = 4.1 \text{ *p} / 0.67$ , where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. [11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).]

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#### EQPT000000014 (AD-001) 4.185 MMBtu/hr Natural Gas-Fired Boiler:

## **Limitation Requirements:**

Condition			
No.	Parameter	Condition	
L-1	Particulate Matter	Particulate Matter: For Emission Point AD-001, the particulate matter emissions shall not exceed 0.6 pounds per million BTU per hour heat input. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).]	
L-2	Opacity	Opacity: For Emission Point AD-001, the permittee shall not cause, allow, or permit the discharge into the ambient air, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity. This shall not apply to vision obscuration caused by uncombined water droplets. [11 Miss. Admin. Code Pt. 2, R. 1.3.B.]	
L-3	Sulfur Dioxide	Sulfur Dioxide: For Emission Point AD-001, the maximum discharge of sulfur oxides shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. [11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).]	

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# EQPT0000000015 (AD-002) 180 kW (241 hp) Natural Gas-Fired Emergency Generator (Spark Ignition Internal Combustion Engine (SI ICE), 4-stroke, rich burn, pre-2006 model):

## **Limitation Requirements:**

Condition No.	Parameter	Condition
L-1	Particulate Matter	Particulate Matter: For Emission Point AD-002, the emissions of particulate matter shall not exceed 0.6 pounds per million BTU per hour heat input. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a)]
L-2	Opacity	Opacity: For Emission Point AD-002, the permittee shall not cause, allow, or permit the discharge into the ambient air of any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity. This shall not apply to vision obscuration caused by uncombined water droplets. [11 Miss. Admin. Code Pt. 2, R. 1.3.B.]

Condition No.	Condition
T-1	For Emission Point AD-002, the permittee is subject to and shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ, "RICE MACT") and the applicable requirements of the General Provisions (40 CFR Part 63, Subpart A). Emission Point AD-002 is an existing emergency RICE for purposes of this Subpart. [40 CFR 63.6585]

#### **GENERAL INFORMATION**

AC Polymers Inc 103 Lowry Drive Byhalia, MS Marshall County

#### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
10494	AC Polymers, Inc.	Official Site Name	06/20/2014	
10494	Fleer Corporation	Historic Site Name	09/09/1992	05/18/2001
MSP092360	AC Polymers Inc	Water - Pretreatment	03/16/2015	02/28/2020
178000054	AC Polymers Inc	Air-Synthetic Minor Operating	12/22/2015	11/30/2020
178000054	AC Polymers Inc	Air-Construction	12/22/2015	

**Basin:** Yazoo River Basin

**Location Description:** Imported from I-sys